Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

Claim 1 (Currently amended): An implantable, biodegradable device, comprising a fibrous matrix, said fibrous matrix comprising first fibers A and second fibers B, wherein fibers A biodegrade faster than fibers B, fibers A and B are present in relative amounts and are organized such that the fibrous matrix is provided with properties useful in repair and/or regeneration of mammalian tissue, wherein one of fibers A and B comprises a biodegradable polymer and one of fibers A and B comprises a biodegradable glass, and wherein the fibrous matrix comprises a gradient structure comprising a transition in the relative concentration of fibers A to fibers B.

Claim 2 (Original): The device of claim 1 wherein the rate of resorption of the fibrous matrix approximates the rate of replacement of the fibrous matrix by tissue.

Claim 3 (Original): The device of claim 1 wherein the weight ratio of fibers A to fibers B is from about 19:1 to about 1:19.

Claim 4 (Original): The device of claim 1 wherein the porosity of the fibrous matrix is effective to facilitate uniform tissue growth therein.

Claim 5 (Original): The device of claim 4 wherein pores ranging in size from about 20 microns to about 400 microns are interconnected and comprise from about 70 percent to about 95 percent of the fibrous matrix.

Claim 6-10 (Canceled)

Claim 11 (Original): The device of claim 1 wherein the fibrous matrix comprises an organized network selected from the group consisting of threads, yarns, nets, laces, felts and nonwovens.

Claim 12 (Original): The device of claim 1 wherein the fibrous matrix comprises a configuration selected from the group consisting of a disk, a rectangle, a square, a tube and a star.

Claim 13 (Original): The device of claim 1 wherein the diameters of fibers A and fibers B range from about 5 microns to about 100 microns.

Claim 14 (Withdrawn): The device of claim 1 wherein fibers A and fibers B are bonded together by a biodegradable polymeric binder.

Claim 15 (Withdrawn): The device of claim 14 wherein the biodegradable polymeric binder is selected from the group consisting of polycaprolactone, polylactic acid, polydioxanone and polyglycolic acid.

Claim 16 (Cancelled)

Claim 17 (Withdrawn): The device of claim 1 wherein said fibrous matrix comprises a continuous transition from fibers A at the periphery of the device to fibers B at the center of the device.

Claim 18. (Withdrawn): The device of claim 1 wherein said fibrous matrix comprises a continuous transition from fibers A at the top of the device to fibers B at the bottom of the device

Claim 19 (Withdrawn): The device of claim 1 wherein the fibrous matrix further comprises a biodegradable, fibrous polymeric coating.

Claim 20 (Withdrawn): The device of claim 19 wherein the biodegradable polymeric coating is selected from the group consisting of polylactic acid, polyglycolic acid, polycaprolactone and copolymers thereof.

Claim 21 (Withdrawn): The device of claim 1 wherein the fibrous matrix is chemically crosslinked or combined with hydrogels.

Claim 22 (Withdrawn): The device of claim 1 wherein the fibrous matrix is coated with an adhesive biological factor selected from the group consisting of fibronectin, vitronectin, V-CAM, I-CAM, N-CAM, elastin, fibrillin, laminin, actin, myosin, collagen, microfilament, intermediate filament, antibody, and fragments thereof, hyaluronic acids, glycosaminoglycans, collagens, peptide fragments, pleiotrophin, endothelin and tenascin-C.

Claim 23 (Withdrawn): The device of claim 1 wherein the fibrous matrix is coated with a growth factor selected from the group consisting of members of TGF-β family, bone morphogenic proteins, fibroblast growth factors-1 and –2, platelet-derived growth factor-AA, and –BB, platelet rich plasma and vascular endothelial cell-derived growth factor.

Claim 24 (Withdrawn): The device of claim 1 wherein the fibrous matrix further comprises seeded or cultured therein cells selected from the group consisting of bone marrow cells, stromal cells, stem cells, embryonic stem cells, chondrocytes, osteoblasts, osteocytes, fibroblasts, pluripotent cells, chondrocyte progenitors, osteoclasts, endothelial cells, macrophages, adipocytes, monocytes, plasma cells, mast cells, umbilical cord cells, leukocytes, epithelial cells, myoblasts, and precursor cells derived from adipose tissue.

Claim 25 (Canceled)

Claim 26 (Canceled)

Claim 27 (Withdrawn): The implant of claim 1, further comprising a fabric barrier layer formed on at least one surface of the implant.

Claim 28 (Withdrawn): The implant of claim 27, wherein the fabric barrier is formed on a top surface and a bottom surface of the implant.

Claim 29 (Withdrawn): The implant of claim 27, wherein the fabric barrier is a dense, fibrous fabric that is effective as a barrier to hyperplasia and tissue adhesion.

Claim 30 (Withdrawn): The implant of claim 29, wherein the fabric barrier is formed of an electrostatically spun aliphatic polyester.

Claim 31 (Cancelled)

Claim 32 (Previously presented): The device of claim 1 wherein the biodegradable polymer is selected from the group consisting of aliphatic polyesters, poly(amino acids), copoly(ether-esters), polyalkylene oxalates, polyamides, poly(iminocarbonates), polyorthoesters, polyoxaesters, polyamidoesters, poly(anhydrides), polyphosphazenes and biopolymers.

Claim 33 (Canceled)

Claim 34 (Previously presented): The device of claim 1 wherein the biodegradable glass comprises a silicate-containing calcium phosphate glass.

Claim 35 (Previously presented): The device of claim 1 wherein the biodegradable glass comprises a calcium phosphate glass wherein some of the calcium ions are replaced by ions selected from the group consisting of iron, sodium, magnesium, potassium, aluminum and zirconium.

Claim 36 (Previously presented): The device of claim 1 wherein the biodegradable glass comprises from about 50 to about 70 weight percent phosphate, from about 0 to about 35 weight percent iron, with the remainder comprising calcium.

Claim 37 (Cancelled)

Claim 38 (Cancelled)

Claim 39 (Cancelled)

Claim 40 (Cancelled)

Claim 41 (Cancelled)

Claim 42 (Cancelled)

Claim 43 (Original): A device of claim 1 wherein the fiberous matrix is penetrated with a bioabsorbable polymer.

Claim 44 (Original): A device of claim 43 wherein bioabsorbable polymer used to the penetrate the fiberous matrix is selected from the group consisting of aliphatic polyesters, poly(amino acids), copoly(ether-esters), polyalkylene oxalates, polyamides, poly(iminocarbonates), polyorthoesters, polyoxaesters, polyamidoesters, poly(anhydrides), polyphosphazenes and biopolymers.